### DRAFT

### **Ergonomic Program Action Items**

### **Executive Summary**

I have review three sources of 'findings' or recommendations for the Ergonomics Program--the Humantech report, the Draft DOE report, and the output of the Ergonomic Workshops of May and July 1999. I have organized each item under six headings. Italics are used to identify the source of each item. At the end of this listing, I have summarized the action items that the Ergonomics Committee should consider including in the strategic plan for the Ergonomics Program.

### **Ergonomic Program Planning and Implementation**

- 1. Annually measure and evaluate the program. (DOE)
  - Status: The Ergonomics Committee is working to develop a strategic plan, performance measures, and evaluation cycle for the Ergonomics Program.
- 2. Develop annual goals, risk reduction priorities, and measures of acceptable performance. (DOE)
  - Status: Ergonomics Committee is considering each of these items as part of its strategic planning work.
- 3. The Ergonomics Committee should establish a specific plan and objectives for ergonomics with risk reduction as a key metric. (*Humantech report*)
  - Status: Ergonomics Committee is considering metrics as part of its strategic planning work.
- 4. Generate a list of all non-office and office workstations (sorted by occupation and tasks) needs to be developed. (*Humantech report*)
  - Status: This will be discussed and prioritized as an issue as part of the

- Performance Measurement (Ergonomics Workshop July 1999)
- Status: The Ergonomics Committee and ESH-5 are addressing these very broad and general action items. Specific actions taken are described in this document.
- 6. "How do we focus our ergonomics program implementation activities on an employee centric program complete with employee accountability?" And, how do we implement the program at the Lab?" Specific areas needing attention were identified as follows:
  - Planning/Priorities
  - Annual Goals/Direction
  - Communication/Ergonomics Committee
  - Resource Allocation
  - Performance Measurement
  - Feedback/Communication
  - Proactive vs. Reactive Program (Ergonomics Workshop July 1999)
  - Status: The Ergonomics Committee and ESH-5 are addressing these very broad and general action items. Specific actions taken are described in this document.
- 7. A written ergonomics process needs to be created, including a strategic plan and priorities. (*Humantech report*)
  - Status: The LIR establishes the ergonomics program for the Laboratory. The
    Ergonomics Committee strategic planning work will identify and prioritize issues,
    establish goals for the program, and measures of performance. One issue to be
    considered by the Ergonomics Committee is documenting the Ergonomics
    Program as a work process. This action item will be sent to the Ergonomics
    Committee for action, recommendations, and prioritization.
- 8. Define the ergonomics roles of managers and supervisors. (Humantech report)
  - Status: This is done in the ergonomics LIR. This can be clarified in the documentation of the Ergonomics Program as a work process. This action item will be sent to the Ergonomics Committee for action, recommendations, and prioritization.

- Status: This action item will be sent to the Ergonomics Committee for action, recommendations, and prioritization.
- 10. Develop a database for summarizing assessment data and scheduling future evaluations. (*Humantech report*)
  - Status: This action item will be sent to the Ergonomics Committee for action, recommendations, and prioritization.
- 11. Use a web-based questionnaire to list all of the workstations to help the Ergonomics Committee to determine the number of employees exposed to the high-risk office and non-office workstations. (*Humantech report*)
  - Status: The web based ergonomics training program and risk assessment tool is currently in the final stages of testing. It will be released Lab-wide as soon as any identified programming problems/issues are resolved.

### **Ergonomic Evaluations**

- 12. A standard ergonomics evaluation method needs to be developed. (*Humantech report*)
  - Status: ESH-5 is currently developing such a tool.
- 13. A plan should be developed to schedule ergonomic assessments. (Humantech report)
  - Status: This action item will be sent to the Ergonomics Committee for action, recommendations, and prioritization.
- 14. Follow-up risk assessments should be performed to verify that improvements have reduced risk as intended and provide a measure of risk reduction. (*Humantech report*)
  - Status: This action item will be sent to the Ergonomics Committee for action, recommendations, and prioritization.
- 15. Criteria needs to be developed to determine who is an ergonomic evaluator to ensure that evaluations are properly executed. (*Humantech report*)

#### **Hazard Control**

### **Control Selection and Installation**

- 16. Based on field evaluations performed and data collected and analyzed, funding should be allocated to complete ergonomic evaluations and making needed changes to office and non-office workstations.
  - Status: This action item will be sent to the Ergonomics Committee for action, recommendations, and prioritization.
- 17. Develop a list of approved equipment for office and non-office solutions. A true ergonomic analysis of each piece of equipment should be completed to ensure the proper fit for employees. (*Humantech report*)
  - Status: Health and safety professionals have evaluated equipment in the
    ergonomics demonstration room. Employees are encouraged to visit the
    ergonomics room to 'try and test' equipment before selecting and purchasing it.
- 18. The equipment choices in the ergonomics room should be scaled back to two or three choices from each of the approved and evaluated solution sets. (*Humantech report*)
  - Status: This action item will be sent to the Ergonomics Committee for action, recommendations, and prioritization.
- 19. An ergonomics resource library should be established to provide access to vendor information and other related materials. (*Humantech report*)
  - Status: This information is provided in the ergonomics demonstration room.
- 20. Anthropometric guidelines should be established to support engineering design of office and non-office workstations. (*Humantech report*)
  - Status: Technical guidelines have been given to BUS-4 to include as performance expectations for the new office design/furniture installation vendor. The performance of the new vendor(s) will be measured against the technical requirements.

management as well as ESH-2 and 5 documentation. This action item will be sent to the Ergonomics Committee for action, recommendations, and prioritization.

- 22. Recommendations developed by safety and health experts need to be implemented. (*DOE*)
  - Status: This issue will be addressed by the Ergonomics Committee as part of the risk reduction section of the strategic plan. This action item will be considered by the Ergonomics Committee for action, recommendations, and prioritization.
- 23. There have been delays in implementing recommended workstation adjustments and receipt of backorder equipment from vendors. (DOE)
  - Status: The Ergonomics Committee has worked closely with BUS-4 to provide input into the Request for Proposal (RFP) that will be used to select a new furniture installation and office design contractor. BUS Division will likely make two awards to firms this time. Performance expectations related to equipment selection, office design, customer responsiveness, order delivery, customer satisfaction, and technical design specifications have been incorporated into the RFP. The selection of the new contractors will occur in CY 2000.
- 24. Safety responsible line management's responsibility for ordering ergonomic equipment is not included in the LIR. (DOE)
  - Status: The Ergonomics Committee can add this to the growing list of changes (additions, deletions, revisions) to the Ergonomics LIR. This action item will be sent to the Ergonomics Committee for action, recommendations, and prioritization.

# **Training**

- 25. Skill based training should be completed for the ergonomics committee and key ergonomics personnel. (*Humantech report*)
  - Status: This action item will be sent to the Ergonomics Committee for action, recommendations, and prioritization.

### Lessons Learned, Information Sharing, Communication

- 27. Before and after case studies should be developed to create a 'problem/solution matrix'. This would assist with the 'fix one, repeat many' concept. These case studies should be placed in a resource area for use by the Ergonomics Committee as needed. (*Humantech report*)
  - Status: This action item will be sent to the Ergonomics Committee for action, recommendations, and prioritization.
- 28. There is no sharing of 'lessons learned'. (Humantech report)
  - Status: The ergonomics web site shares important information.
- 29. Develop a LANL ergonomic web site for sharing information. (Humantech report)
  - Status: This is completed.

#### **Performance and Effectiveness Measurement**

- 30. It is important that the effectiveness of the Ergonomics Program be measured by individual interventions and the program overall. (*DOE*)
  - Status:
  - Two one-day workshops were held in May and July 1999 to discuss identify strengths, weaknesses, opportunities, and factors affecting the performance of the program. This information has been used to improve the program.
  - This is being addressed in the strategic plan being developed by the Ergonomics Committee.
  - As part of a master's thesis, a survey is being developed to determine whether or not classroom training and general awareness of ergonomics influences employees to take actions to reduce their risk to ergonomic hazards.
  - In September 1999, ESH-5 performed a self assessment of the ergonomics program by:
    - performing 150 ergonomic evaluations of office and non-office workplaces; evaluated the extent to which line organizations have implemented the LIR;
    - identifying risks or hazards associated with different office and non-office

- 31. It is difficult from a statistical perspective to measure the effectiveness of the ergonomics program throughout the Lab. (*DOE*)
  - Status: During a seven day period in September 1999, an independent assessment of the Ergonomics Program was performed. More than 150 workplace evaluations were performed by certified ergonomists. The implementation of the Ergonomics Program was assessed against self-assessment criteria specified in the ergonomics LIR.
  - Web-based training and risk assessment tool is online and going through final program 'debugging' before Lab-wide release. Training and risk assessment data by organization will be generated, stored, and analyzed.
  - An ergonomics survey will address will determine is there is a relationship between ergonomics training (classroom and awareness level) and the reduction of employee exposure to ergonomic risks and hazards.
- 32. Performance against an established strategic plan should be measured. (*Humantech report*)
  - Status: Annual reviews, audits, and performance checks are being incorporated into the strategic plan for the Ergonomics Program. This action item will be sent to the Ergonomics Committee for action, recommendations, and prioritization.
- 33. A periodic review of the ergonomics program should be completed, both internal and external. (*Humantech report*)
  - Status: Annual reviews, audits, and performance checks are being incorporated into the strategic plan for the Ergonomics Program. This action item will be sent to the Ergonomics Committee for action, recommendations, and prioritization.
- 34. Benchmark the ergonomics program with other DOE organizations. (*Humantech report*)
  - Status: This action item will be sent to the Ergonomics Committee for action, recommendations, and prioritization.

### **Summary of Open Action Items**

### **Ergonomic Program Planning and Implementation**

- 1. Develop a strategic plan, set risk reduction goals and priorities, measure performance, evaluate performance, make changes.
- 2. Generate a list of all workplaces and sort according workplace, job, task, occupation, and/or ergonomic risk.
- 3. Define the Ergonomics Program as a work process.
- 4. Define the roles and responsibilities of supervisors and managers in ergonomics.

### **Hazard Evaluation and Data Analysis**

- 1. Review strain, sprain, and back injury data to consider reclassifying injuries as ergonomic illnesses.
- 2. Summarize ergonomic assessment data.
- 3. Plan and schedule future ergonomic evaluations.
- 4. Plan, schedule, and perform follow-up risk assessments (ergonomic evaluations).
- 5. Develop and apply criteria for qualifying people as ergonomic evaluators.

#### **Hazard Control**

### **Control Selection and Installation**

- 1. Allocate funding to mitigate and/or control identified risks and hazards.
- 2. Reduce the number of equipment choices in the ergonomics room.

## Follow-up

- 1. Close-out ergonomic evaluations and document evaluations as cases.
- 2. Managers and supervisors implement hazard and risk control recommendations.
- 3. Amend and revise the ergonomics LIR.

## **Training**

# **Performance and Effectiveness Measurement**

- 1. Measure the effectiveness and performance of the Ergonomics Program.
- 2. Review the performance of the Ergonomics Program annually.
- 3. Benchmark the Ergonomics Program with other DOE ergonomics programs.